

REMARKS

The above Amendments and these Remarks are in reply to the Office Action mailed January 11, 2006. A petition for extension of time and the appropriate fee are included herewith.

Claims 1-24 were pending in the Application prior to the outstanding Office Action. Claims 9-21 and 24 were withdrawn from consideration by electing the currently pending claims in response to the examiner's restriction requirement. In the current Office Action, the Examiner has rejected Claims 1, 2, 4-8, 22 and 23, and objected to Claims 3, 22, and 23. The present Reply cancels claim 3, amends claims 1, 22 and 23, and adds new claims 25-29, leaving for the Examiner's present consideration claims 1, 2, 4-8, 22, 23, and 25-29. Reconsideration of the rejections is requested.

I. Summary of Examiner's Rejections/Objections

Claims 1, 2, 4-7, 22 and 23 were rejected under 35 U.S.C. §102(b) as being anticipated by Kumar et al. (U.S. Pat. No. 5,963,664) ("Kumar").

Claim 8 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Kumar et al.* in view of Amano et al. (U.S. Pat. No. 5,287,093) ("Amano").

Claim 3 was objected to as being dependent upon a rejected base claim, but was considered to be allowable if rewritten in independent form including the limitations of the base claim and intervening claims.

Claims 22 and 23 were objected to as informal.

II. Summary of Applicant's Response

Rejection under Section 103(a): Applicant's remarks show that claim 8 is patentable over the cited art.

Rejections under Section 102(b): Claims 1, 2, 4-7, 22 and 23 were rejected as anticipated; Applicant respectfully submits amendments to independent claims 1 and 22, and well as Remarks, establishing that the rejected claims are allowable over the cited art.

New Claims. Applicant submits new independent claim 25, which includes the limitations of independent claim 1 and the subject matter of dependent claim 8; Applicant respectfully submits that Applicant's Remarks regarding claim 8 establish that claim 8 is allowable as non-obvious over the cited art and therefore, new claim 25 is allowable over the cited art. New dependent claims 26-29 repeat the subject matter of dependent claims 4-7. As such, Applicant believes new claims 25-29 are allowable over the cited art.

Objections to claims 22 and 23: Applicant has made the indicated amendments to obviate the objections.

III. Response to Rejections

A. Obviousness Pursuant to Section 103(a)

The examiner rejected claim 8 as obvious pursuant to section 103(a) over Kumar and Amano. Office Action at 5. The examiner admitted that Kumar fails to disclose cross-fading, and suggests that Amano teaches this limitation. Office Action at 5 (citing Amano at abstract; col. 2, lines 1-28, 38-67). Applicant respectfully disagrees that Amano teaches cross-fading in the manner disclosed in the present application and taught in claim 8.

The cited disclosure of Amano does not teach cross-fading according to the present invention. According to Amano, a first image is *replaced* by a second image as the first image is dissolved and the second image is cross-faded in. In other words, one image disappears by fading out, as another appears by fading in. See Col. 2, lines 39-43 ("a 'dissolve (cross fade)' technique entails gradually

shifting from one image to another. More particularly, the technique allows a current image to be faded out and a subsequent image to be simultaneously faded in.”)

By contrast, in the present invention, “cross-fading” has an entirely different meaning. The present disclosure *does not replace* a first image with a second by fading in and out. Rather, two images are *combined*, and pixel intensities in the overlapping region are faded so that the two images appear smoothly joined together. *See* Figs. 13-16; *see also* ¶ [0131]-[0141]. In particular:

Once the source polygons have been warped to a common coordinate system and parallax corrected for *overlapping images*, a “cross-fade” can be utilized to combine them, as illustrated in Fig. 13.

In this process, two or more images are obtained from different cameras. For example, cameras 1300 and 1320 of Fig. 13 each have imaged a same square 1310. Each image is faded by reducing pixel intensities across the patch (imaged square) in a linear fashion. For example, the patch from the left camera 1300 is faded so that pixel intensities fade to zero at the rightmost edge of the patch, while the leftmost are unchanged (see expanded patch 1330). Conversely, the right camera patch is faded such that the leftmost pixels go to zero (see expanded patch 1340). *When the pixel intensities of right and left patches are added, the result is a patch image that smoothly blends the two images.* This technique further reduces artifacts due to camera separation and image intensity differences.

Application at ¶¶ [0131]-[0132] (emphasis added).

Based on the foregoing, the cross-fading *combination of images* disclosed and taught in the present application is distinct from the dissolve/cross-fading *replacement of images* disclosed and taught in Amano. In fact, the present invention does not claim “dissolve/cross-fading”; it only claims “cross-fading,” so that no amendment of this terminology is necessitated by citation to Amano. As such, Amano and Kumar do not teach every element of claim 8, and claim 8 constitutes allowable patentable subject matter.

Applicant has added new independent claim 25 with the subject matter of claims 1 and 8. Because claim 8 is patentable over the cited art, new independent claim 25 is patentable over the cited art. Because claim 25 is patentable over the cited art, dependent claims 26-29, based on claims 4-7, also are patentable over the cited art. Applicant respectfully requests reconsideration of the rejections and a Notice of Allowance.

Applicant also respectfully notes that the examiner failed to provide any motivation in either Kumar or Amano for combining the cited art. As such, the examiner used impermissible hindsight in offering the combination of the two references as a basis for rejecting the present application as obvious pursuant to section 103. Applicant respectfully submits that for this additional reason, the obviousness rejection based on Kumar and Amano merits the examiner's reconsideration.

B. Anticipation Pursuant to Section 102(b):

The examiner rejected claims 1, 2, 4-7, 22, and 23 as anticipated over Kumar, U.S. Pat. No. 5,963,664 ("Kumar"). Office Action at 3. The examiner also indicated that "Claim 3 is objected to as being dependent upon a rejected base claim," but that otherwise claim 3 would be allowable over the cited art (*i.e.*, Kumar) if rewritten to include the limitations of independent claim 1 and any intervening claims (*i.e.*, claim 2). Office Action at 6.

Accordingly, Applicant has amended claim 1 to include the subject matter of dependent claim 3 and has cancelled claim 3. Applicant respectfully submits that claim 1 as amended is allowable over the cited art. Accordingly, claims 2 and 4-8, which depend from claim 1, are allowable over the cited art. Applicant respectfully requests reconsideration of the rejections and a Notice of Allowance.

The examiner also rejected claims 22 and 23 over Kumar. Office Action at 3-4. Applicant has amended independent claim 22 and now believes that claim 22 and dependent claim 23 both are patentable over the cited art. Specifically, Applicant has amended claim 22 to teach subject matter of cancelled claim 3, which the examiner determined embodied allowable subject matter. Accordingly, Applicant submits that the subject matter in independent claim 22, and in dependent claim 23 (depending from claim 22) is allowable over the cited art. Applicant respectfully requests reconsideration of the rejection and a Notice of Allowance.

C. Claim Objections.

The examiner objected to claims 22 and 23 as informal. Applicant has amended claim 22 to make the suggested changes. No changes were suggested with regard to claim 23. Applicant believes that the objections therefore are overcome.


D. Conclusion.

In light of the above, it is respectfully submitted that all claims should be allowable, and a Notice of Allowance is requested. The Examiner is respectfully requested to telephone the undersigned if she can assist in any way in expediting issuance of the patent.

The Commissioner is authorized to charge any underpayment or credit any overpayment of fees in connection with this communication to Deposit Account No. 06-1325.

Respectfully submitted,

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